

# Testimony before the Maine Joint Committee on Health and Human Services Regarding Banning the Sale of Flavored Tobacco and Vapor Products Lindsey Stroud, Policy Analyst Taxpayers Protection Alliance May 7, 2021

Chairman Claxton, Chairwoman Meyer, Members of the Committee:

Thank you for your time today to discuss the issue of banning the sale of tobacco and vapor products in Maine. My name is Lindsey Stroud and I am a Policy Analyst with the Taxpayers Protection Alliance (TPA). TPA is a non-profit, non-partisan organization dedicated to educating the public through the research, analysis and dissemination of information on the government's effects on the economy.

As lawmakers attempt to address the critical issue of youth use of age- restricted products (including electronic cigarettes and vapor products), some policymakers are seeking to ban sales of flavored tobacco and vapor products. Although addressing youth use is laudable, policymakers should refrain from policies that would restrict adult access to tobacco harm reduction products, as well as implementing policies that further subvert adult choices, such as is the case with the proposal to ban flavors in tobacco and vapor products.

Also, during a pandemic when politicians are urging the public to use science as a guiding concept, it is important to look at the science behind tobacco harm reduction, including electronic cigarettes, and promote their use to adult smokers to quit.

### **Tobacco Economics 101: Maine**

In 2019, 17.6 percent of adults in the Pine Tree State were current smokers, amounting to 192,785 smokers. Further 13.9 percent of Maine adults (152,256 adults) were daily smokers. When figuring a pack-per-day, more than 1.1 billion cigarettes were smoked in 2019 by Maine adults, or about three million per day.<sup>2</sup>

In 2019, Maine imposed a \$2.00 excise tax on a pack of cigarettes.<sup>3</sup> In 2019, Maine collected \$111.1 million in cigarette excise taxes, when figuring for a pack-a-day habit. This amounts to \$730.00 per smoker per year.

During 2019, Maine allocated only \$4.8 million in state funding towards tobacco control program. This amounts to \$24.90 per smoker per year, and \$19.29 per resident under 18 years.

### Vapor Economics 101: Maine

Electronic cigarettes and vapor products are not only a harm reduction tool for hundreds of thousands of smokers in the Pine Tree State, they're also an economic boon.



In 2018, according to the Vapor Technology Association, the industry created 313 direct vaping-related jobs, including manufacturing, retail, and wholesale jobs in Maine, which generated \$6.6 million in wages alone. Moreover, the industry has created hundreds of secondary jobs in the Pine Tree State, bringing the total economic impact in 2018 to \$51,426,100. In the same year, Maine received more than \$4 million in state taxes attributable to the vaping industry. These figures do not include sales in convenience stores that sell vapor products including disposables and prefilled cartridges. In 2016, sales of these products in Maine eclipsed \$4.2 million. (See Supplemental Graph 1)

When analyzing earlier smoking rates, it seems that e-cigarettes are effective at reducing adult combustible cigarette use in Maine. For example, WalletHub estimated the "true cost of smoking" including "...cost of a cigarette pack per day, health care expenditures, income losses and other costs." WalletHub estimated the true cost for smoker in Maine to be \$46,309 persmoker per-year.

In 1995, 25 percent<sup>7</sup> of Maine adults smoked combustible cigarettes, amounting to approximately 233,577 adults.<sup>8</sup> In 1995, among all adults, 22.2 percent (207,416 adults) reported smoking every day. In 2019, 17.6 percent of adults in the Pine Tree State were current smokers, amounting to 192,785 smokers. Further 13.9 percent of Maine adults (152,256 adults) were daily smokers in 2019.

Among Maine adults, current smoking decreased by 29.6 percent between 1995 and 2019. Moreover, there are an estimated 81,057 fewer smokers in 2019, compared to 1995, and 90,916 fewer daily smokers. Using the WalletHub figures, this reduction represents over \$3.8 billion in yearly savings.

### **Tobacco and Vapor Product Use Among Maine Youth**

The latest data on youth tobacco and vapor product use comes from the 2019 Maine Integrated Youth Health Survey Data (MIYHS)<sup>9</sup> and the Centers for Disease Control and Prevention's Youth Risk Behavior Survey (YRBS).<sup>10</sup>

In 2019, according to the MIYHS, among Maine high school students, only 23 percent reported ever trying a combustible cigarette, and only 7.1 percent reported using a cigarette on at least one occasion in the past 30 days. Regarding vapor product use, among Maine high school students in 2019, 45.1 percent reported every trying an e-cigarette and 28.7 percent reported using a vapor product on at least one occasion in the 30 days prior to the survey.

According to data from the CDC's YRBS, in 2019, 46.3 percent of Maine high school students reported ever-trying e-cigarettes, 30.2 percent reported past 30-day use, and 6.3 percent reported using vapor products daily. (See Supplemental Graph 2)

It is worthy to note that youth combustible cigarette use is at an all-time low. In 2019, 6.8 percent of Maine high school students reported using a cigarette in the past 30 days, an 82



percent decrease from 1995, when 37.8 percent of high school students smoked cigarettes. Further, daily cigarette use has decreased by 91.9 percent from 16 percent of high school students reporting daily smoking in 1995 to 1.3 percent in 2019. (See Supplemental Graph 3)

# Vapor Product Emergence Correlates with Lower Young Adult Smoking, Has Reduced Over All Smoking

Electronic cigarettes and vapor products were first introduced to the U.S. in 2007 "and between 2009 and 2012, retail sales of e-cigarettes expanded to all major markets in the United States." Examining data from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance Survey finds that e-cigarettes' market emergence has been more effective than MSA payments in reducing smoking rates among young adults in Maine.

In 1997, among current adult smokers in Maine, 32.9 percent were 18 to 24 years old. In 2007, this had decreased by 12.8 percent to 28.7 percent of adult smokers in Maine being between 18 to 24 years old. Conversely, 10 years after e-cigarette's market emergence in 2009, smoking rates among current smokers aged 18 to 24 years old decreased by 24.5 percent. Indeed, in 2009, among current smokers in Maine, 18.4 percent were between 18 to 24 years old. In 2019, only 13.9 percent of current smokers were 18 to 24 years old.

Further e-cigarettes' market emergence was associated with a larger decline in average annual percent decreases among all current smokers. Between 1997 and 2007, the percentage of current smokers decreased on average 0.98 percent each year. Between 2009 and 2019, annual percentage declines average at 1.8 percent. (See Supplemental Graph 4)

### **Wasted Tobacco Dollars**

Deeply problematic with the proposed legislation is the fact that Maine spends very little on tobacco control, including education and prevention.

Between 2000 and 2019, the Pine Tree State allocated only \$231.9 million towards tobacco control programs. This is only 9.8 percent of what Maine collected in cigarette taxes in the 19-year time span between 2000 and 2019 and only 21.9 percent of MSA payments the state collected in the 20 years. To put it in further perspective, in 19 years, Maine allocated only 6.7 percent of tobacco settlement payments and taxes on programs to prevent tobacco use. (See Supplemental Graph 5)

### Flavors and Youth E-Cigarette Use

Despite media alarmism, many American high school students are not overwhelmingly using vapor products due to flavors. Indeed, in analyses of state youth tobacco use surveys, other factors including social sources are most often cited among youth for reasons to use e-cigarettes and vapor products.



In 2017, among Hawaiian high school students that had ever used e-cigarettes, 26.4 percent cited flavors as a reason for e-cigarette use, compared to 38.9 percent that reported "other." <sup>13</sup>

According to results from the 2018 YRBS, Maryland high school students reported using flavored vapor products, but flavors weren't overwhelmingly cited by e-cigarette users as a reason for use. <sup>14</sup> When asked about the "main reason" Maryland high school users used flavors only 3.2 percent responded "flavors." Conversely, 13 percent reported because "friend/family used them," 11.7 percent reported "other," and 3.8 percent reported using e-cigarettes because they were less harmful than other tobacco products.

In 2019, among all Montana high school students, only 7 percent reported using vapor products because of flavors, compared to 13.5 percent that reported using e-cigarettes because of "friend or family member used them." Further, 25.9 percent of Montana high school students reported using vapor products for "some other reason."

In 2019, among all students, only 4.5 percent of Rhode Island high school students claimed to have used e-cigarettes because they were available in flavors, while 12.5 cited the influence of a friend and/or family member who used them and 15.9 percent reported using e-cigarettes "for some other reason."<sup>16</sup>

In 2017, among current e-cigarette users, only 17 percent of Vermont high school students reported flavors as a reason to use e-cigarettes. Comparatively, 35 percent cited friends and/or family members and 33 percent cited "other." <sup>17</sup>

In 2019, among high school students that were current e-cigarette users, only 10 percent of Vermont youth that used e-cigarettes cited flavors as a primary reason for using e-cigarettes, while 17 percent of Vermont high school students reported using e-cigarettes because their family and/or friends used them.<sup>18</sup>

Lastly, in 2017, among all Virginia high school students, only 6.2 percent reported using ecigarettes because of flavors, while 11.3 percent used them because a friend and/or family member used them. <sup>19</sup> In 2019, among all Virginia high school students, only 3.9 percent reported using e-cigarettes because of flavors, 12.1 used for some other reason, and 9.6 used them because of friends and/or family members. <sup>20</sup>

### **E-Cigarettes and Tobacco Harm Reduction**

The evidence of harm associated with combustible cigarettes has been understood since the 1964 U.S. Surgeon General's Report that determined that smoking causes cancer. Research overwhelmingly shows the smoke created by the burning of tobacco, rather than the nicotine, produces the harmful chemicals found in combustible cigarettes. There are an estimated 600 ingredients in each tobacco cigarette, and "when burned, [they] create more than 7,000 chemicals." As a result of these chemicals, cigarette smoking is directly linked to



cardiovascular and respiratory diseases, numerous types of cancer, and increases in other health risks among the smoking population.<sup>23</sup>

For decades, policymakers and public health officials looking to reduce smoking rates have relied on strategies such as emphasizing the possibility of death related to tobacco use and implementing tobacco-related restrictions and taxes to motivate smokers to quit using cigarettes. However, there are much more effective ways to reduce tobacco use than relying on government mandates and "quit or die" approaches.

During the past 30 years, the tobacco harm reduction (THR) approach has successfully helped millions of smokers transition to less-harmful alternatives. THRs include effective nicotine delivery systems, such as smokeless tobacco, snus, electronic cigarettes (e-cigarettes), and vaping. E-cigarettes and vaping devices have emerged as especially powerful THR tools, helping nearly three million U.S. adults quit smoking from 2007 to 2015.

In fact, an estimated 10.8 million American adults were using electronic cigarettes and vapor products in 2016.<sup>24</sup> Of the 10.8 million, only 15 percent, or 1.6 million adults, were neversmokers, indicating that e-cigarettes are overwhelmingly used by current and/or former smokers.

### **E-Cigarettes and Vapor Products 101**

E-cigarettes were first introduced in the United States in 2007 by a company called Ruyan.<sup>25</sup> Soon after their introduction, Ruyan and other brands began to offer the first generation of e-cigarettes, called "cigalikes." These devices provide users with an experience that simulates smoking traditional tobacco cigarettes. Cig-alikes are typically composed of three parts: a cartridge that contains an e-liquid, with or without nicotine; an atomizer to heat the e-liquid to vapor; and a battery.

In later years, manufacturers added second-generation tank systems to e-cigarette products, followed by larger third-generation personal vaporizers, which vape users commonly call "mods."<sup>26</sup> These devices can either be closed or open systems.

Closed systems, often referred to as "pod systems," contain a disposable cartridge that is discarded after consumption. Open systems contain a tank that users can refill with e-liquid. Both closed and open systems utilize the same three primary parts included in cigalikes—a liquid, an atomizer with a heating element, and a battery— as well as other electronic parts. Unlike cigalikes, "mods" allow users to manage flavorings and the amount of vapor produced by controlling the temperature that heats the e-liquid.

Mods also permit consumers to control nicotine levels. Current nicotine levels in e-liquids range from zero to greater than 50 milligrams per milliliter (mL).<sup>27</sup> Many users have reported reducing their nicotine concentration levels after using vaping devices for a prolonged period, indicating nicotine is not the only reason people choose to vape.



### **Health Effects of Electronic Cigarettes and Vapor Products**

Despite recent media reports, e-cigarettes are significantly less harmful than combustible cigarettes. Public health statements on the harms of e-cigarettes include:

**Public Health England:** In 2015, Public Health England, a leading health agency in the United Kingdom and similar to the FDA found "that using [e-cigarettes are] around 95% safer than smoking," and that their use "could help reducing smoking related disease, death and health inequalities." In 2018, the agency reiterated their findings, finding vaping to be "at least 95% less harmful than smoking."

As recent as February 2021, PHE provided the latest update to their ongoing report on the effects of vapor products in adults in the UK. The authors found that in the UK, ecigarettes were the "most popular aid used by people to quit smoking [and] ... vaping is positively associated with quitting smoking successfully."<sup>30</sup>

**The Royal College of Physicians:** In 2016, the Royal College of Physicians found the use of e-cigarettes and vaping devices "unlikely to exceed 5% of the risk of harm from smoking tobacco." The Royal College of Physicians (RCP) is another United Kingdombased public health organization, and the same public group the United States relied on for its 1964 Surgeon General's report on smoking and health.

The National Academies of Sciences, Engineering, and Medicine: In January 2018, the academy noted "using current generation e-cigarettes is less harmful than smoking."<sup>32</sup>

A 2017 study in *BMJ*'s peer-reviewed journal *Tobacco Control* examined health outcomes using "a strategy of switching cigarette smokers to e-cigarette use ... in the USA to accelerate tobacco control progress." The authors concluded that replacing e-cigarettes "for tobacco cigarettes would result in an estimated 6.6 million fewer deaths and more than 86 million fewer life-years lost."

An October 2020 review in the *Cochrane Library Database of Systematic Reviews* analyzed 50 completed studies which had been published up until January 2020 and represented more than 12,400 participants.

The authors found that there was "moderate-certainty evidence, limited by imprecision, that quit rates were higher in people randomized to nicotine [e-cigarettes] than in those randomized to nicotine replacement therapy." The authors found that e-cigarette use translated "to an additional four successful quitters per 100." The authors also found higher quit rates in participants that had used e-cigarettes containing nicotine, compared to the participants that had not used nicotine.

Notably, the authors found that for "every 100 people using nicotine e-cigarettes to stop smoking, 10 might successfully stop, compared with only six of 100 people using nicotine replacement therapy or nicotine-free e-cigarettes."



### **Effects of Flavor Bans**

Flavor bans have had little effect on reducing youth e-cigarette use and may lead to increased combustible cigarette rates, as evidenced in San Francisco, California.<sup>34</sup>

In April 2018, a ban on the sale of flavored e-cigarettes and vapor products went into effect in San Francisco and in January of 2020, the city implemented a full ban on any electronic vapor product. Unfortunately, these measures have failed to lower youth tobacco and vapor product use.

Data from an analysis of the 2019 Youth Risk Behavior Survey show that 16 percent of San Francisco high school students had used a vapor product on at least one occasion in 2019 – a 125 percent increase from 2017 when 7.1 percent of San Francisco high school students reported using an e-cigarette.<sup>35</sup> Daily use more than doubled, from 0.7 percent of high school students in 2017, to 1.9 percent of San Francisco high school students reporting using an e-cigarette or vapor product every day in 2019.

Worse, despite nearly a decade of significant declines, youth use of combustible cigarettes seems to be on the rise in Frisco. In 2009, 35.6 percent of San Francisco high school students reported ever trying combustible cigarettes. This figure continued to decline to 16.7 percent in 2017. In 2019, the declining trend reversed and 18.6 percent of high school students reported ever trying a combustible cigarette. Similarly, current cigarette use increased from 4.7 percent of San Francisco high school students in 2017 to 6.5 percent in 2019.

An April 2020 study in *Addictive Behavior Reports* examined the impact of San Francisco's flavor ban on young adults by surveying a sample of San Francisco residents aged 18 to 34 years.<sup>36</sup> Although the ban did have an effect in decreasing vaping rates, the authors noted "a significant increase in cigarette smoking" among participants aged 18 to 24 years old.

Other municipal flavor bans have also had no effect on youth e-cigarette use.<sup>37</sup> For example, Santa Clara County, California, banned flavored tobacco products to age-restricted stores in 2014. Despite this, youth e-cigarette use *increased*. In the 2015-16 California Youth Tobacco Survey (CYTS), 7.5 percent of Santa Clara high school students reported current use of e-cigarettes. In the 2017-18 CYTS, this *increased* to 10.7 percent.

## Menthol Bans Have Little Effect on Smoking Rates, Lead to Black Markets, Lost Revenue and Will Create Racial Tension

Beyond e-cigarettes, policymakers' fears about the role of menthol and flavorings in cigarettes and cigars are overblown and banning these products will likely lead to black markets.

Data from the National Health Interview Survey (NHIS) finds nearly a third of all American adult smokers smoke menthol cigarettes. In a 2015 NHIS survey, "of the 36.5 million American



adult smokers, about 10.7 million reported that they smoked menthol cigarettes," and white menthol smokers "far outnumbered" the black and African American menthol smokers.<sup>38</sup>

Although lawmakers believe banning menthol cigarettes will deter persons from smoking those, such a ban will likely lead to black markets. A 2012 study featured in the journal *Addiction* found a quarter of menthol smokers surveyed indicated they would find a way to purchase, even illegally, menthol cigarettes should a menthol ban go into place.<sup>39</sup> Further, there is little evidence that smokers would actually quit under a menthol ban. A 2015 study in *Nicotine & Tobacco Research* found only 28 percent of menthol smokers would give up cigarettes if menthol cigarettes were banned.<sup>40</sup>

Moreover, there is no evidence to suggest that menthol cigarettes lead to youth tobacco use. Analysts at the Reason Foundation examined youth tobacco rates and menthol cigarette sales. <sup>41</sup> The authors of the 2020 report found that states "with more menthol cigarette consumption relative to all cigarettes have *lower* rates of child smoking." Indeed, the only "predictive relationship" is between child and adult smoking rates, finding that "states with higher rates of adult use cause higher rates of youth use."

With certainty, a ban on flavored tobacco and vapor products would lead to a loss of revenue without decreasing smoking rates as menthol smokers in Maine are likely to travel to neighboring states to purchase menthol products. This has been demonstrated in Massachusetts, which banned the sale of flavored tobacco and vapor products, including menthol cigarettes and took effect June 1, 2020.

An analysis by the Tax Foundation found that "Massachusetts' flavor ban has not limited use, just changed where Bay Staters purchase cigarettes."<sup>42</sup> The analysis noted that sales of cigarette tax stamps in the Northeast "have stayed remarkably stable," and that "Massachusetts sales plummeted, but only because those sales went elsewhere."

The Tax Foundation's analysis found that sales of cigarettes "skyrocketed" in New Hampshire and Rhode Island – growing 55.8 percent and 56 percent, respectively, between June 2019 and June 2020.

Lawmakers should take note that menthol sales bans will strain minority communities. Although white Americans smoke more menthol cigarettes than black or African Americans, "black smokers [are] 10-11 times more likely to smoke" menthol cigarettes than white smokers.<sup>43</sup>

Given African Americans' preference for menthol cigarettes, a ban on menthol cigarettes would force police to further scrutinize African Americans and likely lead to unintended consequences.

A 2015 analysis from the National Research Council examined characteristics in the illicit tobacco market.<sup>44</sup> The researchers found that although lower income persons were less likely to travel to purchase lower-taxed cigarettes, "having a higher share of non-white households was associated with a lower probability of finding a local tax stamp" and "neighborhoods with higher



proportions of minorities are more likely to have formal or informal networks that allow circumvention of the cigarette taxes."

Lawmakers in Maine should reexamine the case of Eric Garner, a man killed in 2014 while being arrested for selling single cigarettes in the city. In a 2019 letter to the New York City council, Garner's mother, as well as Trayvon Martin's mother, implored officials to "pay very close attention to the unintended consequences of a ban on menthol cigarettes and what it would mean for communities of color." Both mothers noted that a menthol ban would "create a whole new market for loosies and re-introduce another version of stop and frisk in black, financially challenged communities."

Other reports have also noted that substitution of e-cigarettes for combustible cigarettes could save the state in health care costs.

According to the Centers for Disease Control and Prevention (CDC), it is now well known that Medicaid recipients smoke at rates of twice the average of privately insured persons. In 2013, "smoking-related diseases cost Medicaid programs an average of \$833 million per state."

A 2015 policy analysis by State Budget Solutions examined electronic cigarettes' effect on Medicaid spending. The author estimated Medicaid savings could have amounted to \$48 billion in 2012 if e-cigarettes had been adopted in place of combustible tobacco cigarettes by all Medicaid recipients who currently consume these products.<sup>47</sup>

A 2017 study by the R Street Institute examined the financial impact to Medicaid costs that would occur should a large number of current Medicaid recipients switch from combustible cigarettes to e-cigarettes or vaping devices. The author used a sample size of "1% of smokers [within] demographic groups permanently" switching. In this analysis, the author estimates Medicaid savings "will be approximately \$2.8 billion per 1 percent of enrollees," over the next 25 years. 48

### **Conclusion & Policy Recommendations:**

It is disingenuous that lawmakers would purport to protect public health yet restrict access to safer products. Rather than restricting access to tobacco harm reduction products and flavored tobacco products, lawmakers should encourage the use of e-cigarettes and work towards earmarking adequate funding for smoking education and prevention programs.

• To address youth use of age-restricted products, as well as adult use of deadly combustible cigarettes, Maine must allocate adequate funding towards tobacco control programs – including cessation services and education and prevention programs. In 19 years, the Pine Tree State allocated only \$231.9 million toward tobacco control programs. During the same time period, Maine received an estimated \$2.377 billion in cigarette tax revenue and \$1.058 billion in tobacco tax settlement payments.



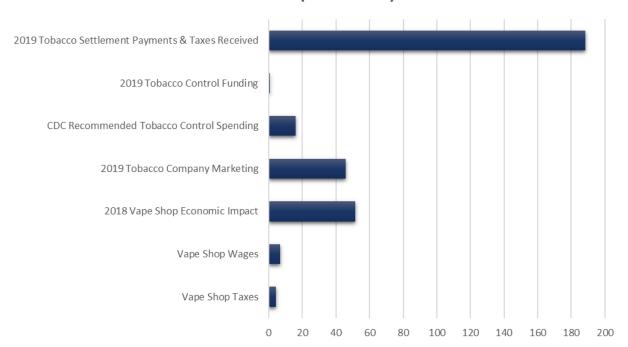
- Existing research from other state youth surveys establish consistent findings that flavors are not the number one driver of youth e-cigarette use. Banning flavors does not address the more cited reasons that youth use e-cigarettes, including because their friends and/or family members use them, and because of "other" reasons.
- The efficacy of e-cigarettes in reducing smoking rates among young adults in Maine is apparent in CDC surveys. Indeed, 10 years after e-cigarettes' market emergence, smoking rates among 18- to 24-year-old Maine residents decreased by 24.5 percent, from 18.9 percent in 2009 to 13. 9 percent in 2019.
- Lawmakers' must face the reality of a larger illicit market in the wake of a ban on flavored tobacco and vapor products prohibition does not automatically translate into reduced use, just different markets.



### **Supplemental Graphs**

### 1. Maine Tobacco and Vapor Monies

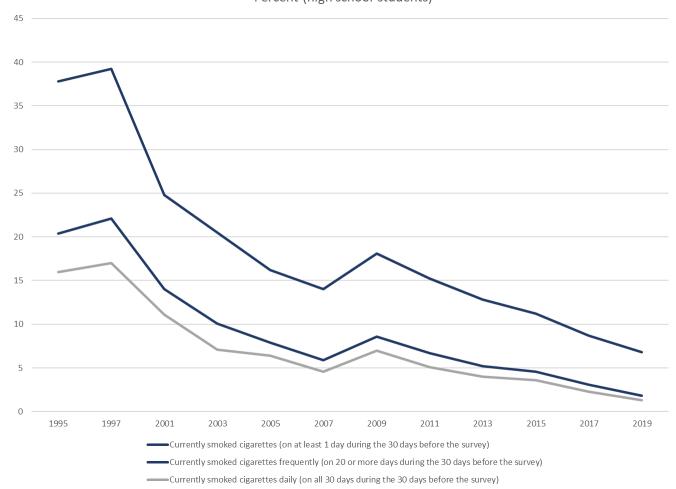
### **Dollars (in millions)**





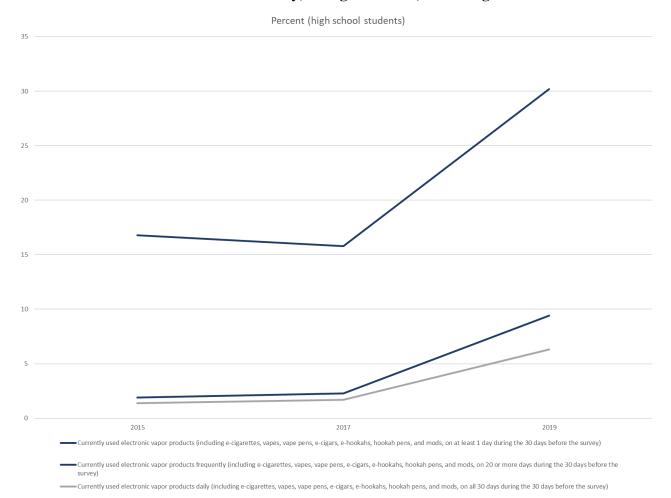
### 2. CDC Youth Risk Behavior Survey, Tobacco Use, Maine High School Students







### 3. CDC Youth Risk Behavior Survey, E-Cigarette Use, Main High School Students





### 4. E-Cigarette Emergence and Young Adult Smoking Rates

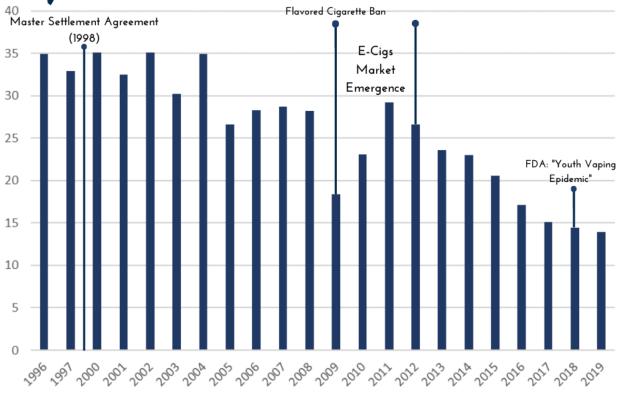


### MAINE BRFSS

### **CURRENT SMOKERS**



Percent aged 18 to 24 years old



Sources: Centers for Disease Control & Prevention, Behavioral Risk Factor Surveillance Survey For more information, contact Lindsey Stroud at lindsey@protectingtaxpayers.org



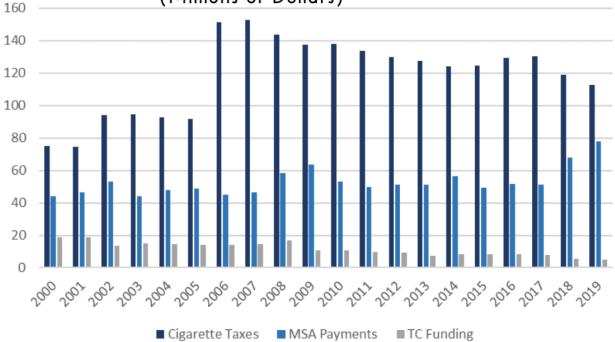
### 5. Tobacco Monies



### **MAINE**

Master Settlement Payments, Cigarette Taxes & Tobacco Control Funding (Millions of Dollars)





Sources: Campaign for Tobacco-Free Kids, Orzechowski and Walker For more information, contact Lindsey Stroud at lindsey@protectingtaxpayers.org

### **References:**

<sup>7</sup> Supra note 1.

<sup>&</sup>lt;sup>1</sup> "BRFSS Prevalence & Trends Data," Centers for Disease Control and Prevention, 2019, <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.

<sup>&</sup>lt;sup>2</sup> "Quick Facts," United States Census Bureau, 2020, https://www.census.gov/quickfacts/CT.

<sup>&</sup>lt;sup>3</sup> Maine, Tobacco Harm Reduction 101, <a href="https://www.thr101.org/maine">https://www.thr101.org/maine</a>.

<sup>&</sup>lt;sup>4</sup> Vapor Technology Association, "The Economic Impact of the Vapor Industry MAINE," 2019, https://vta.guerrillaeconomics.net/reports/2027bdfd-f427-4bfa-a57b-5258c91973d1?.

<sup>&</sup>lt;sup>5</sup> Teresa W. Wang et al., "National and State-Specific Unit Sales and Prices for Electronic Cigarettes, United States, 2012-2016," Preventing Chronic Disease, Centers for Disease Control and Prevention, August 2, 2018, <a href="https://www.cdc.gov/pcd/issues/2018/17\_0555.htm">https://www.cdc.gov/pcd/issues/2018/17\_0555.htm</a>.

<sup>&</sup>lt;sup>6</sup> Adam McCann, "The Real Cost of Smoking by State," *WalletHub*, January 15, 2020, <a href="https://wallethub.com/edu/the-financial-cost-of-smoking-by-state/9520">https://wallethub.com/edu/the-financial-cost-of-smoking-by-state/9520</a>.



- <sup>8</sup> Kids Count Data Center, "Total population by child and adult populations in the United States," *The Annie E. Casey Foundation*, September 2020, <a href="https://datacenter.kidscount.org/data/tables/99-total-population-by-child-and-adult-populations#detailed/1/any/false/1729,37,871,870,573,869,36,868,867,133/39,40,41/416,417">https://datacenter.kidscount.org/data/tables/99-total-population-by-child-and-adult-populations#detailed/1/any/false/1729,37,871,870,573,869,36,868,867,133/39,40,41/416,417</a>.
- <sup>9</sup> Maine Public Health, "Maine Integrated Youth Health Survey Data," 2019, https://data.mainepublichealth.gov/miyhs/home.
- <sup>10</sup> Centers for Disease Control and Prevention, "High School YRBS 2019 Results," 2019, https://nccd.cdc.gov/Youthonline/App/Default.aspx.
- <sup>11</sup> National Center for Chronic Disease Prevention and Health Promotion, "E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General," 2016, <a href="https://www.ncbi.nlm.nih.gov/books/NBK538679/">https://www.ncbi.nlm.nih.gov/books/NBK538679/</a>.
- <sup>12</sup> Campaign for Tobacco-Free Kids, "Appendix A: History of Spending for State Tobacco Prevention Programs," 2021, <a href="https://www.tobaccofreekids.org/assets/factsheets/0209.pdf">https://www.tobaccofreekids.org/assets/factsheets/0209.pdf</a>.
- <sup>13</sup> Lance Ching, Ph.D., et al., "Data Highlights from the 2017 Hawai'i Youth Tobacco Survey," Hawai'i State Department of Health, June 29,
- 2018, http://www.hawaiihealthmatters.org/content/sites/hawaii/YTS 2017 Report.pdf.
- <sup>14</sup> Maryland Department of Public Health, "Maryland High School Survey Detail Tables Weighted Data," 2018 Youth Risk Behavior Survey, 2018,
- $\frac{https://phpa.health.maryland.gov/ccdpc/Reports/Documents/2018\%20YRBS\%20YTS\%20Reports/Maryland/2018MDH\%20Detail\%20Tables.pdf.}{DH\%20Detail\%20Tables.pdf}$
- <sup>15</sup> Montana Office of Public Instruction, "2019 Montana Youth Risk Behavior Survey High School Results," 2019, http://opi.mt.gov/Portals/182/Page% 20Files/YRBS/2019YRBS/2019\_MT\_YRBS\_FullReport.pdf?ver=2019-08-23-083248-820.
- <sup>16</sup> State of Rhode Island Department of Health, "Rhode Island High School Survey Detail Tables Weighted Data," 2019 Youth Risk Behavior Survey Results, 2019,
- https://health.ri.gov/materialbyothers/yrbs/2019HighSchoolDetailTables.pdf.
- <sup>17</sup> Vermont Department of Health, "2017 Vermont Youth Risk Behavior Survey Report Winooski SD Report," 2018, https://www.healthvermont.gov/sites/default/files/documents/pdf/WINOOSKI\_SD\_%28SU017%29.pdf.
- <sup>18</sup> Vermont Department of Health, "2019 Vermont Youth Risk Behavior Survey Statewide Results," March, 2020, https://www.healthvermont.gov/sites/default/files/documents/pdf/CHS YRBS statewide report.pdf.
- <sup>19</sup> Virginia Department of Health, "Virginia High School Survey Detail Tables Weighted Data," 2017 Youth Risk Behavior Survey, 2017, <a href="https://www.vdh.virginia.gov/content/uploads/sites/69/2018/04/2017VAH-Detail-Tables.pdf">https://www.vdh.virginia.gov/content/uploads/sites/69/2018/04/2017VAH-Detail-Tables.pdf</a>.
- <sup>20</sup> Virginia Department of Health, "Virginia High School Survey Detail Tables Weighted Data," 2019 Youth Risk Behavior Survey Results, 2019, <a href="https://www.vdh.virginia.gov/content/uploads/sites/69/2020/06/2019VAH-Detail-Tables.pdf">https://www.vdh.virginia.gov/content/uploads/sites/69/2020/06/2019VAH-Detail-Tables.pdf</a>.
- <sup>21</sup> Brad Rodu, For Smokers Only: How Smokeless Tobacco Can Save Your Life, Sumner Books, 1995, p. 103.
- <sup>22</sup> American Lung Foundation, "What's In a Cigarette?," February 20, 2019, <a href="https://www.lung.org/stop-smoking/smoking-facts/whats-in-a-cigarette.html">https://www.lung.org/stop-smoking/smoking-facts/whats-in-a-cigarette.html</a>.
- <sup>23</sup> Centers for Disease Control and Prevention, "Health Effects of Cigarette Smoking," January 17, 2018, https://www.cdc.gov/tobacco/data\_statistics/ fact\_sheets/health\_effects/effects\_cig\_smoking/index.htm.
- <sup>24</sup> Mohammadhassan Mirbolouk, MD et *al.*, "Prevalence and Distribution of E-Cigarette Use Among U.S. Adults: Behavioral Risk Factor Surveillance System, 2016," *Annals of Internal Medicine*, October 2, 2018, <a href="https://www.acpjournals.org/doi/10.7326/M17-3440">https://www.acpjournals.org/doi/10.7326/M17-3440</a>.
- <sup>25</sup> Consumer Advocates for Smoke-Free Alternatives Association, "A Historical Timeline of Electronic Cigarettes," n.d., <a href="http://casaa.org/historicaltimeline-of-electronic-cigarettes">http://casaa.org/historicaltimeline-of-electronic-cigarettes</a>.
- <sup>26</sup> WHO Framework Convention on Tobacco Control, "Electronic Nicotine Delivery Systems and Electronic Non-Nicotine Delivery Systems (ANDS/ ENNDS)," August 2016, http://www.who.int/fctc/cop/cop7/FCTC\_COP\_7\_11\_EN.pdf.
- <sup>27</sup> Vaping 360, "Nicotine Strengths: How to Choose What's Right for You," February 26, 2019, <a href="https://vaping360.com/best-e-liquids/nicotine-strengthspercentages">https://vaping360.com/best-e-liquids/nicotine-strengthspercentages</a>.
- <sup>28</sup> A. McNeill *et al.*, "E-cigarettes: an evidence update," Public Health England, August, 2015, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachm.



- <sup>29</sup> A. McNeill *et al.*, "Evidence review of e-cigarettes and heated tobacco products 2018," Public Health England, February
- 2018, <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/684963/Evidence\_review\_of\_e-cigarettes\_and\_heated\_tobacco\_products\_2018.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/684963/Evidence\_review\_of\_e-cigarettes\_and\_heated\_tobacco\_products\_2018.pdf</a>.
- <sup>30</sup> A. McNeill *et* al., "Vaping in England: an evidence update including vaping for smoking cessation, February 2021," Public Health England,
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/962221/Vaping\_in\_England\_evidence\_update\_February\_2021.pdf.
- <sup>31</sup> Royal College of Physicians, *Nicotine without Smoke: Tobacco Harm Reduction*, April,
- 2016, https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction-0.
- <sup>32</sup> Committee on the Review of the Health Effects of Electronic Nicotine Delivery Systems, "Public Health Consequences of E-Cigarettes," The National Academies of Science, Engineering, and Medicine, 2018, <a href="https://www.nap.edu/catalog/24952/public-health-consequences-of-e-cigarettes">https://www.nap.edu/catalog/24952/public-health-consequences-of-e-cigarettes</a>.
- <sup>33</sup> David T. Levy *et al.*, "Potential deaths averted in USA by replacing cigarettes with e-cigarettes," *Tobacco Control*, October 2, 2017, <a href="http://tobaccocontrol.bmj.com/content/early/2017/08/30/tobaccocontrol-2017-053759.info">http://tobaccocontrol.bmj.com/content/early/2017/08/30/tobaccocontrol-2017-053759.info</a>.
- <sup>34</sup> Lindsey Stroud, "Vaping Up, Smoking Increasing Among Teens in San Francisco Despite Bans," *Tobacco Harm Reduction 101*, July 28, 2020, <a href="https://www.thr101.org/research/2020/vaping-up-smoking-increasing-among-teens-in-san-francisco-despite-bans">https://www.thr101.org/research/2020/vaping-up-smoking-increasing-among-teens-in-san-francisco-despite-bans</a>.
- <sup>35</sup> Centers for Disease Control and Prevention, "San Francisco, CA 2017 Results," *High School Youth Risk Behavior Survey*, 2017, <a href="https://nccd.cdc.gov/youthonline/App/Results.aspx?LID=SF">https://nccd.cdc.gov/youthonline/App/Results.aspx?LID=SF</a>.
- <sup>36</sup> Yong Yang et *al.*, "The Impact of a Comprehensive Tobacco Product Flavor Ban in San Francisco Among Young Adults," *Addictive Behavior Reports*, April 1, 2020,
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7186365/#!po=0.961538.
- <sup>37</sup> Lindsey Stroud, "Flavor Bans Do Not Reduce Youth E-Cigarette Use," *Tobacco Harm Reduction 101*, 2019, https://www.thr101.org/research/2019/flavor-bans-do-not-reduce-youth-e-cigarette-use.
- <sup>38</sup> Brad Rodu, "Who Smokes Menthol Cigarettes?" *Tobacco Truth*, December 4, 2018, <a href="https://rodutobaccotruth.blogspot.com/2018/12/who-smokes-menthol-cigarettes.html">https://rodutobaccotruth.blogspot.com/2018/12/who-smokes-menthol-cigarettes.html</a>.
- <sup>39</sup> RJ O'Connor *et al.*, "What would menthol smokers do if menthol in cigarettes were banned?" *Addiction*, April 4, 2012, <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3370153/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3370153/</a>.
- <sup>40</sup> Olivia A. Wackowski, PhD, MPH, *et al.*, "Switching to E-Cigarettes in the Event of a Menthol Cigarette Ban," *Nicotine & Tobacco Research*, January 29, 2015,
- https://www.researchgate.net/publication/271592485 Switching to E-
- Cigarettes in the Event of a Menthol Cigarette Ban.
- <sup>41</sup> Guy Bentley and J.J. Rich, "Does Menthol Cigarette Distribution Affect Child or Adult Cigarette Use?" Policy Study, Reason Foundation, January 30, 2020, <a href="https://reason.org/policy-study/does-menthol-cigarette-distribution-affect-child-or-adult-cigarette-use/">https://reason.org/policy-study/does-menthol-cigarette-distribution-affect-child-or-adult-cigarette-use/</a>.
- <sup>42</sup> Urlrik Boesen, "Massachusetts Ban of Flavored Cigarettes Is Getting Expensive," *Tax Foundation*, August 3, 2020, https://taxfoundation.org/massachusetts-ban-on-flavored-cigarettes-is-getting-expensive/.
- <sup>43</sup> D. Lawrence et *al.*, "National patterns and correlates of mentholated cigarette use in the United States," *Addiction*, December, 2010, <a href="https://www.ncbi.nlm.nih.gov/pubmed/21059133">https://www.ncbi.nlm.nih.gov/pubmed/21059133</a>.
- <sup>44</sup> National Research Council, "Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context and Lessons from International Experiences," *The National Academies Press*, 2015, https://www.nap.edu/download/19016.
- <sup>45</sup> Carl Campanile, "Menthol cig ban will lead to more stop-and-frisk: Moms of Garner, Martin," *New York Post*, October 16, 2019, <a href="https://nypost.com/2019/10/16/menthol-cig-ban-will-lead-to-more-stop-and-frisk-moms-of-garner-martin/">https://nypost.com/2019/10/16/menthol-cig-ban-will-lead-to-more-stop-and-frisk-moms-of-garner-martin/</a>.
- <sup>46</sup> American Lung Foundation, "Approaches to Promoting Medicaid Tobacco Cessation Coverage: Promising Practices and Lessons Learned," June 9,
- 2016, <a href="https://web.archive.org/web/20170623183710/https://www.lung.org/assets/documents/advocacy-archive/promoting-medicaid-tobacco-cessation.pdf">https://web.archive.org/web/20170623183710/https://www.lung.org/assets/documents/advocacy-archive/promoting-medicaid-tobacco-cessation.pdf</a>. Accessed June 23, 2017.



<sup>47</sup> J. Scott Moody, "E-Cigarettes Poised to Save Medicaid Billions," State Budget Solutions, March 31,

2015, <a href="https://www.heartland.org/\_template-assets/documents/publications/20150331\_sbsmediciadecigarettes033115.pdf">https://www.heartland.org/\_template-assets/documents/publications/20150331\_sbsmediciadecigarettes033115.pdf</a>.

48 Edward Anselm, "Tobacco Harm Reduction Potential for 'Heat Not Burn," R Street Institute, February

2017, https://www.rstreet.org/wp-content/uploads/2017/02/85.

# TOBACCO & VAPING 101: MAINE





### BY: LINDSEY STROUD

Combustible cigarette use among American youth and adults has reached all-time lows, but many policymakers are concerned with the increased use of electronic cigarettes and vapor products, especially among youth and young adults.

This paper examines smoking rates among adults in the Pine Tree State, youth use of tobacco and vapor products, and the effectiveness of tobacco settlement payments, taxes, and vapor products on reducing combustible cigarette use.

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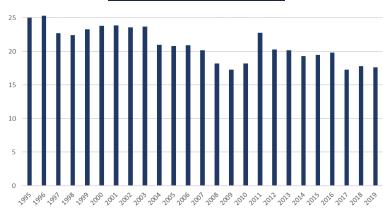
# ADULT SMOKING RATES

In 1995, 25 percent[1] of Maine adults smoked combustible cigarettes, amounting to approximately 233,577 adults.[2] In 1995, among all adults, 22.2 percent (207,416 adults) reported smoking every day.

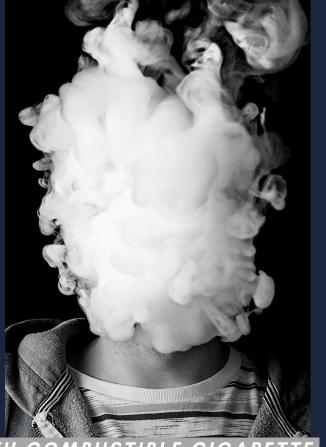
In 2019, 17.6 percent of adults in the Pine Tree State were current smokers, amounting to 192,785 smokers. Further 13.9 percent of Maine adults (152,256 adults) were daily smokers in 2019.

Among Maine adults, current smoking decreased by 29.6 percent between 1995 and 2019. Moreover, there are an estimated 81,057 fewer smokers in 2019, compared to 1995, and 90,916 fewer daily smokers.

PERCENTAGE OF ADULTS WHO SMOKE



AMONG MAINE ADULTS,
CURRENT SMOKING DECREASED
BY 29.6 PERCENT BETWEEN 1995
AND 2019.



YOUTH COMBUSTIBLE CIGARETTE USE HAS DECREASED 82 PERCENT SINCE 1995.

# YOUTH TOBACCO AND VAPING RATES

The most recent data on youth tobacco and vapor product use in Maine comes from the 2019 Youth Risk Behavior Survey.[3] In 2019, 46.3 percent of Maine high school students reported ever-trying ecigarettes, 30.2 percent reported past 30-day use, and 6.3 percent reported using vapor products daily.

It is worthy to note that youth combustible cigarette use is at an all-time low. In 2019, 6.8 percent of Maine high school students reported using a cigarette in the past 30 days, an 82 percent decrease from 1995, when 37.8 percent of high school students smoked cigarettes. Further, daily cigarette use has decreased by 91.9 percent from 16 percent of high school students reporting daily smoking in 1995 to 1.3 percent in 2019.



# CIGARETTE TAX REVENUE

Between 2000 and 2019, Maine collected an estimated \$2.377 billion in cigarette taxes.[4] During the same 19-year period, the Pine Tree State increased the tax rate on cigarettes twice; in 2001 and 2005.

Although the increased tax rates have resulted in revenue increases, these increases are only seen in the short term as fewer Maine adults smoke over time. For example, in 2005, Maine increased the cigarette tax rates by \$1.00, bringing the total state excise tax to \$2.00-per-pack. In 2007, the Pine Tree State collected \$153 million in cigarette tax revenue, a 66.5 percent increase from 2005's \$91.9 million. However, since 2008, cigarette tax collections have continued to decline, on average, by 2.5 percent annually. Indeed, in 2019, Maine collected only \$112.8 million in cigarette tax revenue, 26.3 percent decline from 2007's cigarette tax revenue.

BETWEEN 2000 AND 2019, MAINE COLLECTED AN ESTIMATED \$2.377 BILLION IN TOBACCO TAXES.

# MASTER SETTLEMENT AGREEMENT

In the mid-1990s, Maine sued tobacco companies to reimburse Medicaid for the costs of treating smoking-related health issues. And, in 1998 with 45 other states, Pine Tree State reached "the largest civil litigation settlement in U.S. history" through the Master Settlement Agreement (MSA). [5]

Under the MSA, states receive annual payments – in perpetuity – from the tobacco companies, while relinquishing future claims against the participating companies. Between 1998 and 2020, Maine collected \$1.141 billion in MSA payments.[6]



BETWEEN 1998 AND 2020, MAINE RECEIVED AN ESTIMATED \$1.141 BILLION IN MSA PAYMENTS.

# VERY LITTLE TOBACCO CONTROL FUNDING

Tobacco taxes and tobacco settlement payments are justified to help offset the costs of smoking, as well as prevent youth initiation. Like most states, Maine spends very little of existing tobacco moneys on tobacco control programs – including education and prevention.

Between 2000 and 2019, Maine allocated only \$231.9 million in state funds towards tobacco control programs. [7] This is only 9.8 percent of what Maine collected in cigarette taxes in the 19-year time span between 2000 and 2019 and only 21.9 percent of MSA payments the state collected in the 20 years. To put it in further perspective, in 19 years, Maine allocated only 6.7 percent of tobacco settlement payments and taxes on programs to prevent tobacco use.

IN 19 YEARS, MAINE
ALLOCATED ONLY 6.7
PERCENT OF TOBACCO
SETTLEMENT PAYMENTS
AND TAXES ON
PROGRAMS TO PREVENT
TOBACCO USE.

# VAPOR PRODUCT EMERGENCE CORRELATES WITH LOWER YOUNG ADULT SMOKING

Electronic cigarettes and vapor products were first introduced to the U.S. in 2007 "and between 2009 and 2012, retail sales of ecigarettes expanded to all major markets in the United States." [8] Examining data from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance Survey finds that e-cigarettes' market emergence has been more effective than MSA payments in reducing smoking rates among young adults in Maine.

In 1997, among current adult smokers in Maine, 32.9 percent were 18 to 24 years old. In 2007, this had decreased by 12.8 percent to 28.7 percent of adult smokers in Maine being between 18 to 24 years old. Conversely, 10 years

after e-cigarette's market emergence in 2009, smoking rates among current smokers aged 18 to 24 years old decreased by 24.5 percent. Indeed, in 2009, among current smokers in Maine, 18.4 percent were between 18 to 24 years old. In 2019, only 13.9 percent of current smokers were 18 to 24 years old.

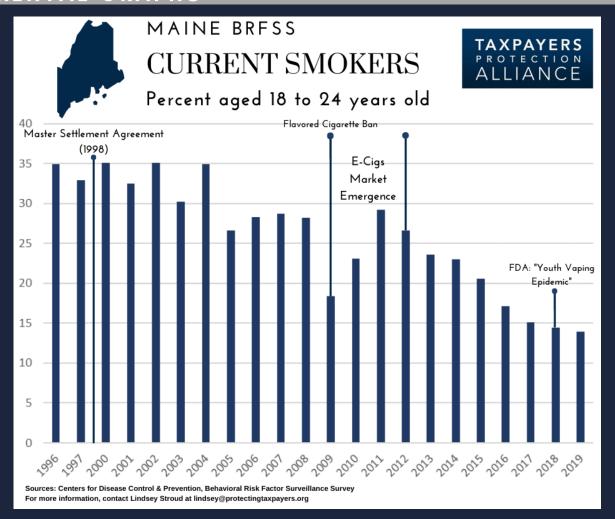
Further e-cigarettes' market emergence was associated with a larger decline in average annual percent decreases among all current smokers. Between 1997 and 2007, the percentage of current smokers decreased on average 0.98 percent each year. Between 2009 and 2019, annual percentage declines average at 1.8 percent.

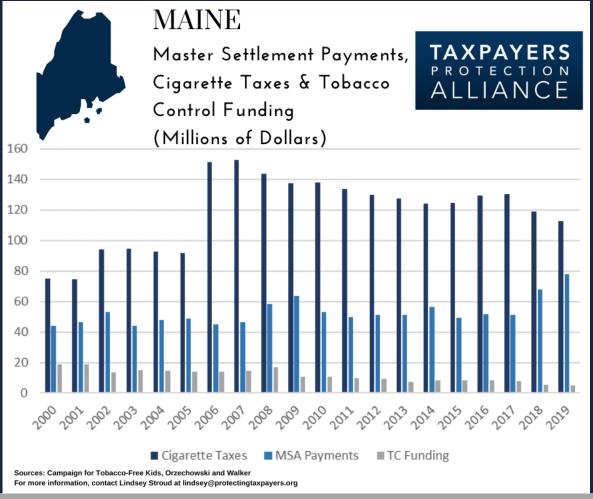
10 YEARS AFTER E-CIGARETTES' MARKET EMERGENCE IN 2009, SMOKING RATES AMONG CURRENT SMOKERS AGED 18 TO 24 YEARS OLD DECREASED BY 24.5 PERCENT.

### **POLICY IMPLICATIONS:**

- In 2019, 17.6 percent of Maine adults smoked combustible cigarettes, a 29.6 percent decrease from 1995. Youth combustible use has decreased by 82 percent from 37.8 percent of high school students smoking cigarettes in 1995 to 6.8 percent in 2019.
- Maine spends very little on tobacco control programs, including prevention and education. In 19 years, the Pine Tree State allocated only \$231.9 million toward tobacco control programs. During the same time period, Maine received an estimated \$2.377 billion in cigarette tax revenue and \$1.058 billion in tobacco tax settlement payments.
- E-cigarettes appear more effective than MSA payments in reducing smoking rates among young adults in Maine.
- 10 years after the MSA, smoking rates decreased among 18– to 24–year–olds by 12.8 percent. And, 10 years after e-cigarettes market emergence, smoking rates among 18 to 24 years old decreased by 24.5 percent.







### **REFERENCES:**

- [1] Centers for Disease Control and Prevention, "BRFSS Prevalence & Trends Data," 2019, <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.
- [2] Kids Count Data Center, "Total population by child and adult populations in the United States," The Annie E. Casey Foundation, September 2020, <a href="https://datacenter.kidscount.org/data/tables/99-total-population-by-child-and-adult-populations#detailed/1/any/false/1729,37,871,870,573,869,36,868,867,133/39,40,41/416,417.">https://datacenter.kidscount.org/data/tables/99-total-population-by-child-and-adult-populations#detailed/1/any/false/1729,37,871,870,573,869,36,868,867,133/39,40,41/416,417.</a>
- [3] Centers for Disease Control and Prevention, "High School YRBS 2019 Results," 2019, <a href="https://nccd.cdc.gov/Youthonline/App/Default.aspx">https://nccd.cdc.gov/Youthonline/App/Default.aspx</a>.
- [4] Orzechowski and Walker, "The Tax Burden on Tobacco Historical Compilation Volume 54," 2019. Print.
- [5] Tobacco Control Legal Consortium, "The Master Settlement Agreement: An Overview," August 2015, p. 1, <a href="http://publichealthlawcenter.org/sites/default/files/resources/tclc-fs-msa-overview-2015.pdf">http://publichealthlawcenter.org/sites/default/files/resources/tclc-fs-msa-overview-2015.pdf</a>.
- [6] Campaign for Tobacco-Free Kids, "Actual Annual Tobacco Settlement Payments Received by the States, 1998 2000," August 13, 2020, <a href="https://www.tobaccofreekids.org/assets/factsheets/0365.pdf">https://www.tobaccofreekids.org/assets/factsheets/0365.pdf</a>.
- [7 Campaign for Tobacco-Free Kids, "Appendix A: History of Spending for State Tobacco Prevention Programs," 2021,
- https://www.tobaccofreekids.org/assets/factsheets/0209.pdf.
- [8] National Center for Chronic Disease Prevention and Health Promotion, "E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General," 2016, <a href="https://www.ncbi.nlm.nih.gov/books/NBK538679/">https://www.ncbi.nlm.nih.gov/books/NBK538679/</a>.

# **ABOUT**

The Taxpayers Protection Alliance (TPA) is a rapid response taxpayer and consumer group dedicated to analyzing and researching the consequences of government intervention in the economy. TPA examines public policy proposals through a non-partisan focus, identifying how government waste and overreach impacts taxpayers and consumers regardless of the political party responsible. TPA holds government officials in the United States (and around the world) accountable through issue briefs, editorials, statements, coalition letters, public interest comments, and radio and television interviews. TPA recognizes the importance of reaching out to concerned citizens through traditional and new media, and utilizes blogs, videos, and social media to connect with taxpayers and government officials. While TPA regularly publishes exposés and criticisms of politicians of all political stripes, TPA also provides constructive criticism and reform proposals based on market principles and a federalist philosophy. TPA empowers taxpayers and consumers to make their opinions known to their elected and non-elected officials and embraces bold solutions to hold an ever-growing government in check.

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